

Notice of Allowability

Application No.

09/785,216

Examiner

Longbit Chai

Applicant(s)

TARBOTTON ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 5/14/2007.
2. ☒ The allowed claim(s) is/are 1,4,6-8,11,13-15,18,20 and 21.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 5/11/2007.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.


AYAZ SHEIKH

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

DETAILED ACTION

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

In view of Pre-Appeal filed on 5/14/2007 and an authorization for this Examiner's Amendment given in a telephone interview with Kevin J. Zilka (Reg. No. 41,429) on 11 May 2007, the claimed subject matters are further distinctly pointed out as patentable features to place the application in the condition for allowance.

This application has been amended as follows:

IN THE CLAIMS

Cancel claims 2, 3, 5, 9, 10, 12, 16, 17 and 19.

Replace claims 1, 8 and 15 as follows.

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Claim 1:

A computer program product stored in a computer readable storage medium comprising a computer program operable to control a computer to apply a plurality of anti computer virus tests to a target computer file, said computer program comprising:

(i) virus scanning logic for detecting if [[said]]a target computer file is infected with a computer virus by applying a plurality of anti computer virus tests to said target computer file;

(ii) virus cleaning and file repair logic for cleaning said target computer file by removing a detected computer virus from said target computer file and for repairing any changes caused by said detected computer virus to said target computer file by reversing said changes;

(iii) virus identifying logic for detecting whether or not said detected computer virus is of a type that can cause changes to said target computer file that cannot be reversed by said virus cleaning and file repair logic; and

(iv) warning generating logic, responsive to said virus identifying logic detecting that said detected computer virus is of a type that can cause changes to said target computer file that cannot be reversed by said virus cleaning and file repair logic, for generating a warning to a user that said target computer file may have suffered irreparable damage;

wherein said virus scanning logic is responsive to a library of tests to detect different computer viruses, said library including data specifying which computer viruses can cause changes that cannot be reversed by said virus cleaning and repair logic;

wherein said warning generating logic can generate a plurality of different types of warnings to said user that said target computer file may have suffered irreparable damage and said library includes data specifying which of said plurality of types of warnings should be issued in response to a particular detected computer virus;
wherein said warning to said user that said target computer file may have suffered irreparable damage is associated with a notification message that includes authentication data identifying said target computer file into which said notification message was inserted.

Claim 8:

A method of applying a plurality of anti computer virus tests to a target computer file, said method comprising the steps of:

(i) virus scanning to detect if [[said]]a target computer file is infected with a computer virus by applying a plurality of anti computer virus tests to said target computer file;

(ii) virus cleaning and file repairing to clean said target computer file by removing a detected computer virus from said target computer file and to repair any changes caused by said detected computer virus to said target computer file by reversing said changes;

(iii) virus identifying to detect whether or not said detected computer virus is of a type that can cause changes to said target computer file that cannot be reversed by said virus cleaning and file repair logic; and

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(iv) if said detected computer virus is of a type that can be removed from said target computer file but can cause changes to said target computer file that cannot be reversed by said virus cleaning and file repair logic, generating a warning to a user that said target computer file may have suffered irreparable damage;

wherein said virus scanning uses a library of tests to detect different computer viruses, said library including data specifying which computer viruses can cause changes that cannot be reversed by said virus cleaning and repair logic;

wherein said warning generation can generate a plurality of different types of warnings to said user that said target computer file may have suffered irreparable damage and said library includes data specifying which of said plurality of types of warnings should be issued in response to a particular detected computer virus;

wherein said warning to said user that said target computer file may have suffered irreparable damage includes a notification message that includes authentication data identifying said target computer file into which said notification message was inserted.

Claim 11:

A method as claimed in claim 8, wherein said warning to said user that said target computer file may have suffered irreparable damage includes adding [[a]]said notification message into said target computer file.

Claim 15:

Apparatus for applying a plurality of anti computer virus tests to a target computer file, said apparatus comprising:

(i) a virus scanner for detecting if ~~[[said]]~~a target computer file is infected with a computer virus by applying a plurality of anti computer virus tests to said target computer file;

(ii) a virus cleaner and file repairer for cleaning said target computer file by removing a detected computer virus from said target computer file and for repairing changes caused by said detected computer virus to said target computer file by reversing said changes;

(iii) a virus identifier for detecting whether or not said detected computer virus is of a type that can cause changes to said target computer file that cannot be reversed by said virus cleaning and file repair logic; and

(iv) a warning generator, responsive to said virus identifier detecting that said detected computer virus is of a type that can be removed from said target computer file but can cause changes to said target computer file that cannot be reversed by said virus cleaning and file repair logic, for generating a warning to a user that said target computer file may have suffered irreparable damage;

wherein said virus scanner is responsive to a library of tests to detect different computer viruses, said library including data specifying which computer viruses can cause changes that cannot be reversed by said virus cleaning and repair logic;

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wherein said warning generator can generate a plurality of different types of warnings to said user that said target computer file may have suffered irreparable damage and said library includes data specifying which of said plurality of types of warnings should be issued in response to a particular detected computer virus;
wherein said warning to said user that said target computer file may have suffered irreparable damage is associated with a notification message that includes authentication data identifying said target computer file into which said notification message was inserted.

Claim 18:

Apparatus as claimed in claim 15, wherein said warning to said user that said target computer file may have suffered irreparable damage includes adding [[a]]said notification message into said target computer file.

Allowable Subject Matter

Claims 1, 4, 6 – 8, 11, 13 – 15, 18, 20 and 21 are allowed.

The following is an examiner's statement of reasons for allowance:

The above mentioned claims are allowable over prior arts because the CPA (Cited Prior Art) of record fails to teach or render obvious the claimed limitations in combination with

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the specific added limitations recited in claims 1, 8 and 15 (& associated dependent claims).

The prior arts on record fail to teach or suggest a method of applying a plurality of anti computer virus tests to a target computer file comprises the steps of: (i) virus scanning to detect if a target computer file is infected with a computer virus by applying a plurality of anti computer virus tests to said target computer file; (ii) virus cleaning and file repairing to clean said target computer file by removing a detected computer virus from said target computer file and to repair any changes caused by said detected computer virus to said target computer file by reversing said changes; (iii) virus identifying to detect whether or not said detected computer virus is of a type that can cause changes to said target computer file that cannot be reversed by said virus cleaning and file repair logic; and (iv) if said detected computer virus is of a type that can be removed from said target computer file but can cause changes to said target computer file that cannot be reversed by said virus cleaning and file repair logic, generating a warning to a user that said target computer file may have suffered irreparable damage; wherein said virus scanning uses a library of tests to detect different computer viruses, said library including data specifying which computer viruses can cause changes that cannot be reversed by said virus cleaning and repair logic; wherein said warning generation can generate a plurality of different types of warnings to said user that said target computer file may have suffered irreparable damage and said library includes data specifying which of said plurality of types of warnings should be issued in response to a particular detected computer virus; wherein said warning to

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said user that said target computer file may have suffered irreparable damage includes a notification message that includes authentication data identifying said target computer file into which said notification message was inserted..

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Longbit Chai whose telephone number is 571-272-3788. The examiner can normally be reached on Monday-Friday 8:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Longbit Chai
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